

**TRANSMITTAL OF INFORMATION DISCLOSURE STATEMENT**  
(Under 37 CFR 1.97(b) or 1.07(c))

Docket No.  
**2000.110A**

In Re Application Of: **Michael Y. Wen**

Confirmation No. **Unknown**

Serial No.  
10/657,360  
~~10/675,360~~

Filing Date  
**September 8, 2003**

Examiner  
**Unknown**

Group Art Unit  
**Unknown**

Title: **Heavy Oil Upgrade Method and Apparatus**

Address to:  
**Commissioner for Patents  
Washington, DC 20231**

**37 CFR 1.97(b)**

1. ☒ The Information Disclosure Statement submitted herewith is being filed within three months of the filing of a national application; within three months of the date of entry of the national stage as set forth in 37 CFR 1.491 in an international application; or before the mailing date of a first Office Action on the merits, whichever event occurs last.

**37 CFR 1.97(c)**

2. ☐ The Information Disclosure Statement submitted herewith is being filed after three months of the filing of a national application, or the date of entry of the national stage as set forth in 37 CFR 1.491 in an international application; or after the mailing date of a first Office Action on the merits, whichever occurred last but before the mailing date of either:

1. a Final Action under 37 CFR 1.113, or
2. a Notice of Allowance under 37 CFR 1.311,

Whichever occurs first.

Also submitted herewith is:

- ☐ a certification as specified in 37 CFR 1.97 (e);

**OR**

- ☐ the fee set forth in 37 CFR 1.17 (p) for submission of an Information Disclosure Statement under 37 CFR 1.97(c).

**TRANSMITTAL OF INFORMATION DISCLOSURE STATEMENT**  
(Under 37 CFR 1.97(b) or 1.07(c))

Docket No.  
**2000.110A**

In Re Application Of: **Michael Y. Wen**

Confirmation No. **Unknown**

Serial No.  
**10/657,360**  
**10/675,360**

Filing Date  
**September 8, 2003**

Examiner  
**Unknown**

Group Art Unit  
**Unknown**

Title: **Heavy Oil Upgrade Method and Apparatus**

**Payment of Fee**

(Only complete if Applicant elects to pay the fee set forth in 37 CFR 1.17(p))

- ☐ A check in the amount of \_\_\_\_\_ is attached.
- ☒ The Assistant Commissioner is hereby authorized to charge and credit Deposit Account No. **05-1328** as described below.
- ☐ Charge the amount of \_\_\_\_\_
- ☐ Credit any overpayment.
- ☒ Charge any additional fee required.

  
\_\_\_\_\_  
Signature

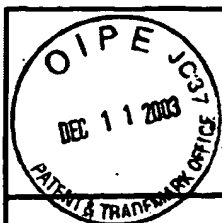
**December 4, 2003**  
\_\_\_\_\_  
Dated

**Douglas J. Collins, Reg. No. 43,561**  
**ExxonMobil - Upstream Research Company**  
P. O. Box 2189  
Houston, TX 77252-2189  
(713) 431-7994 Phone  
(713) 431-4664 Fax

I certify that this document is being deposited on December 4, 2003 with the U.S. Postal Service with sufficient postage as first class mail under 37 C.F.R. 1.8 and is addressed to the Commissioner for Patents, Washington, D.C. 20231.

  
\_\_\_\_\_  
Signature of Person Mailing Correspondence

**Margaret Gnewuch**  
\_\_\_\_\_  
Typed or Printed Name of Person Mailing Correspondence



# **INFORMATION DISCLOSURE CITATION**

(Use several sheets if necessary)

Docket Number (Optional)

2000.110A

Application Number

10/657,360

Applicants

Michael Y. Wen

Filing Date

Sept. 8, 2003

Group Art Unit

Unknown

## **U.S. PATENT DOCUMENTS**

*EXAMINER INITIAL	REF	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
		4,294,686	10/13/81	Fisher et al.	208	56	
		5,069,775	12/03/91	Grosboll	208	108	
		5,133,941	07/28/92	Hays et al.	422	140	
		5,269,909	12/14/93	Ovalles et al.	208	370	
		5,817,229	10/06/98	Sudhakar et al.	208	299	
		6,004,453	12/21/99	Benham et al.	208	108	
		6,016,868	01/25/00	Gregoli et al.	166	261	
		6,059,957	05/09/00	Khan et al.	208	108	

## **FOREIGN PATENT DOCUMENTS**

REF	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	Translation	
						YES	NO
	WO 00/18854	04/06/00	PCT				
	WO 00/23540	04/27/00	PCT				
	WO 00/61705	10/19/00	PCT				
	EP 1 096 002	02.05.2001	Europe				

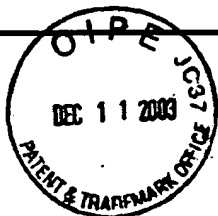
## **OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)**

	J. K. Moll and F. T. T. Ng, "A Novel Process for Upgrading Heavy Oil/Bitumen Emulsions Via In Situ Hydrogen", Department of Chemical Engineering, University of Waterloo, Waterloo, Ontario, Canada, pp. 1-2, March 9, 2000
	R. Paez, L. Luzardo, and J. Guitian, "Current and Future Upgrading Options for the Orinoco Heavy Crude Oils", Petroleos de Venezuela, S.A., Caracas, Venezuela, pp. 1-11
	K. C. Williams, "Technology Evolution and Commercial Development at Imperial's Cold Lake Production Project", Imperial Oil Limited, Proceedings of the Sixteenth World Petroleum Congress, Calgary, Alberta, Canada, Vol. 2, pp. 217-224, June 11-15, 2000
	"Production Site Heavy-Oil Upgrader Shows Promise", Oil & Gas Journal, pp. 56-57, November 20, 2000

EXAMINER

DATE CONSIDERED

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP Section 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.



**INFORMATION DISCLOSURE CITATION**  
(Use several sheets if necessary)

Docket Number (Optional)

2000.110A

Application Number

10/657,360

Applicants

Michael Y. Wen

Filing Date

Sept. 8, 2003

Group Art Unit

Unknown

**U.S. PATENT DOCUMENTS**

*EXAMINER INITIAL	REF	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
		1,991,750	02/19/1935	Keeling	196	67	
		4,118,925	10/10/1978	Sperry et al.	60	39.05	
		4,298,457	11/03/1981	Oblad et al.	208	107	
		4,415,431	11/15/1983	Matyas et al.	208	8 R	
		4,931,171	06/05/1990	Piotter	208	409	
		5,922,090	07/13/1999	Fujimura et al.	48	197 R	
		5,883,138	03/16/1999	Hershkowitz et al.	518	703	
		5,886,056	03/23/1999	Hershkowitz et al.	518	703	
		5,935,489	08/10/1999	Hershkowitz et al.	252	373	
		5,980,596	11/09/1999	Hershkowitz et al.	48	127.9	
		5,980,782	11/09/1999	Hershkowitz et al.	252	373	
		6,267,912	07/31/2001	Hershkowitz et al.	252	373	
		6,274,032	08/14/01	Hood et al.	208	309	
		5,688,741	11/18/97	Carrazza et al.	502	344	
		4,234,407	11/18/80	Duncan et al.	208	8 R	
		4,169,128	09/25/79	Sinor et al.	422	224	

**OTHER DOCUMENTS** (Including Author, Title, Date, Pertinent Pages, Etc.)

	Hans Weiss, et al., "Satcon A Novel Process for Refinery Residue Conversion", 16 <sup>th</sup> World Petroleum Congress, Forum 6, Calgary, Canada, June 12, 2000, pp. 1-7.
	Pedro Pereira, et al., "Aquaconversion technology offers added value to E. Venezuela synthetic crude oil production", Oil & Gas Journal, May 14, 2001, pp. 79-86.
	Murray Gray, "Upgrading Technology: What is new and what is around the corner?", 2001 Oil Sands Conference, Fort McMurray, Alberta, Canada, September 5, 2001.

EXAMINER

DATE CONSIDERED

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP Section 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.